

Goddard Space Flight Center Mobile Crane Lift Plan Worksheet

1. Company Name	
2. Name of Person Preparing Lift Plan / Date	
3. Project Name and Location	
4. Load Description	
5. Crane Description- Type, Manufacturer, Model # (multiple crane lifts need a lift plan for each crane)	
6. Lift Description(attach diagram of lift and load placement)	
7. Load Condition (describe)	
8. Known Center of Gravity (attach diagram showing CG location)	
9. Source of Load Weight (attach a copy of drawings, calculations, bill of lading, etc.)	
10. Load Weight Empty	Lbs.
11. Weight of Load Contents / Fluids	Lbs.
12. Weight of Auxiliary Block	Lbs.
13. Weight of Main Block	Lbs.
14. Weight of Lifting Beam	Lbs.
15. Weight of Slings, Shackles, Other Rigging (see block 52)	Lbs.
16. Deduction for Jib / Fly (if applicable) (see block 33)	Lbs.
17. Weight of Hoist Rope (if applicable)	Lbs.
18. Weight of Auxiliary Head / Rope (if applicable)	Lbs.
19. Additional Deductions (list if applicable)	Lbs.
20. Gross Load (add block 10 – 19)	Lbs.

Goddard Space Flight Center Mobile Crane Lift Plan Worksheet

21. Boom Configuration	
22. Boom Length at pick-up	Feet
23. Boom Length at set down	Feet
24. Counterweight	Lbs.
25. Boom Angle at Pick-up (if applicable)	Degrees
26. Radius at Pick-up (if applicable)	Feet
27. Boom Angle at Set-down (if applicable)	Degrees
28. Radius at Set-down (if applicable)	Feet
29. Capacity at minimum boom angle / maximum radius (attach copy of actual load chart used)	
	Lbs.
30. Maximum Load on crane for this lift (Gross load from block 20)	
	Lbs.
31. Percentage of crane's rated capacity in this configuration	
	%
32. JIB /FLY Erected: _____ Stowed: _____ Stored: _____	
33. If JIB / FLY is used: Length: _____ Angle: _____	
34. Rated Capacity of JIB / FLY from chart .	
35. Weight of JIB if installed but not in use: _____ Lbs.	
36. Soil Conditions / level/ underground hazards/ crane mat required?	
37. Outriggers (full/partial)/ pads / matting / on rubber?	
38. Buildings, equipment, or structure to lift / swing over?	
39. Travel required? ____ YES ____ NO	
40. Working quadrants / swing restrictions?	

Goddard Space Flight Center Mobile Crane Lift Plan Worksheet

41. High voltage / electrical hazards / other hazards?	
42. Other considerations?	
43. Slings (number, size, type)	
44. Slings rated capacity per configuration (see block 45)	
45. Total weight of slings	Lbs.
46. Hitch (vertical, basket, choker) Sling configuration angle: _____ Degrees Factor: _____%	
47. Shackles (number, size)	
48. Shackles rated capacity:	Lbs.
49. Total Weight of shackles	Lbs.
50. Spreader Beam/other rigging required? (type, size, capacity)	
51. Weight of spreader beam/other rigging:	Lbs.
52. Connection to Load Capacity each (lugs, bollards, pad eyes, none)	
53. Total Weight of all rigging (total of blocks 44, 48, 50 & 52)	Lbs.

REQUIRED ATTACHMENTS:

1. Load Placement diagram showing location of pick and final place points.
2. Rigging diagram with sling angles, expected loads and load CG.
3. Photocopy of actual LOAD CHARTS used to calculate crane capacity.
4. Rigging certifications.
5. Rigging load limit charts (Safe Work Load Limit).
6. Crane certification (Annual/Daily Checklist).
7. Operator's Certification.
8. Rigger's Certification.
9. Narrative of lift procedures.
10. Source of load weight (see blocks 8 and 9).

Goddard Space Flight Center Mobile Crane Lift Plan Worksheet

INSTRUCTIONS:

1. Name of contractor (company) performing the lift.
2. Name of person preparing this lift plan & date prepared.
3. Project name and actual location of lift.
4. Describe the load and any special considerations.
5. Self explanatory
6. Brief description of pick-up and placement of load. Attach diagram.
7. Describe the load and any special considerations (e.g., dry, solid, filled with liquid, stable, unstable, etc.)
8. Is the load's center of gravity known? If so, where is it documented? Attach diagram.
9. Document source of load weight (e.g., drawings, calculations, bill of lading, etc.)
10. Self explanatory
11. Self explanatory
12. Self explanatory
13. Self explanatory
14. Self explanatory
15. Self explanatory
16. Self explanatory
17. Self explanatory
18. Self explanatory
19. List all additional deductions and weights
20. Add blocks 10 through 19
21. Describe boom configuration. Refer to manufacturer's terminology.
22. Self explanatory
23. Self explanatory
24. Self explanatory
25. Insert value if load chart uses boom angle
26. Insert value if load chart uses radius
27. Insert value if load chart uses boom angle
28. Insert value if load chart uses radius
29. Crane's rated capacity at minimum boom angle / maximum radius. Figure worst case between pick and place.
30. Copy gross load from block 20
31. Block 29 divided by block 28.
32. Check to indicate Jib/fly is erected, stowed or stored off of the crane.
33. If Jib is used, enter the length and angle of the boom.
34. List the JIB capacity from the load chart.
35. The weight of the JIB if it is installed on the boom, but not used during the lift.
36. Describe site, soil, stability conditions and any underground hazards or concerns.
37. Describe outrigger setup and required matting (if applicable).

Goddard Space Flight Center Mobile Crane Lift Plan Worksheet

38. Describe considerations for buildings, structures, or equipment which will be under the load during the lift.
39. Describe crane travel with load on the hook (if applicable).
40. Describe planned crane working quadrant(s) and any swing restrictions.
41. Describe any electrical hazards or concerns in close proximity to the crane.
42. Describe other considerations of note such as restricted head room, use of taglines, reduced wind limitations, traffic control, etc..
43. Describe slings to be used.
44. List the maximum rated capacity the sling can lift in pounds.
45. The weight of the sling to be used.
46. The type of hitch (vertical, choker, basket) to be used and its sling configuration angle and factor.
47. Describe shackles to be used (number & size).
48. The maximum rated capacity of each shackle in pounds.
49. The total weight of all shackles used.
50. Describe spreader beam / other rigging used. State type, size, capacity.
51. Self explanatory.
52. Self explanatory.
53. The total weight of all rigging that will be used.